



Sustainable Initiatives at Southern Division



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Overview

- **Where We've Been**
- **Current Initiatives**
- **Where We're Heading...Policy**



Where We've Been...



BQ 99 - NTC Great Lakes, IL

- 9 Bldgs, 60 Million
- McHugh-Wight - DesignBuild
- ENSAR Group - Sustainable Consult.
- Completed Sep 1999



Where We've Been...



BQ 99

- **Key Features**

- **Native landscaping**
- **Increased envelope insulation**
- **Operable windows**
- **DDC Controls**
- **Increased daylighting**
- **Low VOCs**
- **Waste Management**



Where We've Been...





Where We've Been...



- **Awards**

- **LEED v. 1.0 certified**
- **2000 White House "Closing the Circle Award"**
- **Chicago Building Congress Finalist**
- **DBIA Sustainable Award**
- **2001 Federal Energy Saver Showcase Award**



Where We've Been...



Barksdale Fitness Center

- **FY99 Congressional Add - \$9.3M**
- **AE Design- SSP - Construction Complete Jun 01**
- **KBJ Architects, Jacksonville, FL**
- **Lincoln Builders, LA**
- **Bradley Guy, U.F., Green Consultant**
- **LEED 1.0 Bronze, Dec. 2002**



Where We've Been...



**Shaded Windows, Reflective Roof,
Natural Grasses, Rainwater Collection**



Reflective Parking Surface



**Alternative
Transportation**



Where We've Been...

Recycled Rubber Flooring



Natural Lighting



Recycled Plastic Lockers



Compact Fluorescents



Where We've Been...

- **Other Air Force**
 - **'01 Barksdale AFB Dormitory, LA**
 - First ACC sustainable Design/Build contract
 - FY01 MILCON - \$6.39M
 - Sustainable Design - RFP evaluation criteria
 - Project awarded with LEED requirement intact
 - Contractor hired sustainable consultant
 - Design met certified levels - missed opportunity during Construction - records
 - **'01 Dining Facility Shaw AFB, SC - \$5.25M**
 - Design met Min. LEED criteria
 - PCAS funds unavailable to continue formal LEED submission.



Where We've Been...





Current Initiatives

Great Lakes RTC Barracks USS Constitution & Roosevelt



- **FY01 - 60 Mil**
- **CCD - Oct. 02**
- **Assembling LEED data**
- **Design target - 35 pts**
- **Actual - ?**



Current Initiatives



Quarterdeck



Current Initiatives

Compartment



Galley



Learning Resource Center



Current Initiatives



FY02-05 RTC Barracks - 4 phase



Current Initiatives

- **Total of 7 Barracks - 266 Mil**
- **Phase 1 - Awd Mar 02 - 82 Mil**
- **Phase 2 - Awd Dec 02 - 75 Mil**
- **2 more phases - 109 Mil option**
- **Based on the '01 Design**
- **Aiming for Silver**



Current - Green Demo

- **“Green Demolition” refers to measures taken beyond typical construction demolition that promotes reuse and recycling and takes special care of protection of human health and the environment. “Green Demolition” is terminology developed with the hopes that more environmental and recycling emphasis will be placed on Navy and DOD construction demolition projects.**



Current - Green Demo

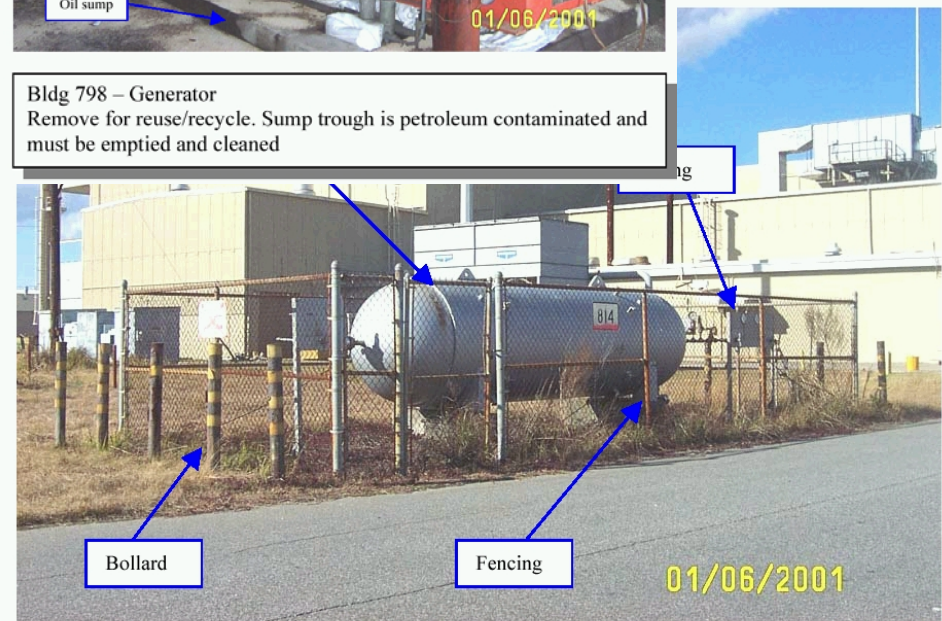
- **Demolition of 36 Bldgs & Structures at NWS Chas'n**
- **2 Mil - Issued under Envir. MAC**
- **Working with our Air/Solid Waste Br. of the ESBL/Base Ops**
- **Key Objective**
 - **Require 70% by weight that will be recycled or reused**
 - **recycle steel & concrete from structures**
 - **sell or reuse windows/doors/boilers/fencing**



Current - Green Demo



Bldg 798 – Generator
Remove for reuse/recycle. Sump trough is petroleum contaminated and must be emptied and cleaned



Nitrogen Tank 814 – beside building 458
Remove tank, piping, fencing, foundation, and bollards



Current - Sustainable Goals

- **RFP's state - "Design/Construct utilizing sustainable concepts, systems & materials that meet these goals:**
 - **Energy Efficient**
 - **Reduces/eliminates toxic substances**
 - **High IAQ conditions**
 - **Efficient materials utilization**
 - **Use bldg materials that can be recycled**
 - **Use of recycled content materials (EPA products)**
 - **Minimize construction waste**
 - **Promote O&M practices that reduce harmful effects on people and the environment**
 - **Can easily be modified or converted as needs change"**



So What???

- Up until now, while Sustainable design (LEED Analysis Report) has been included in the RFP and a part of the Technical Evaluation, it has not been a hard requirement.
- LEED Analysis Report...
 - “not a contractual requirement to design to LEED criteria or obtain any particular LEED Rating. However, the Navy endorses the principles of Sustainable Design contained in the LEED rating system and will utilize as a means of measuring the degree of implementation of sustainable principles.”



New Policy

- **Draft Instruction Policy 9830.1**
 - NAVFAC's policy to reduce the total Cost of Ownership by incorporating Sustainable concepts...
 - **Effective immediately, all new and major renovation projects shall meet LEED *Certified* level**
 - Unless justifiable not to pursue
 - N/A for NATO, Host Nation, Leased
 - All AE & SSP include sustainable selection qualifications
 - Use LEED (2.1) as measurement tool



New Policy

- **Submission to USGBC not required, but highly recommended on high visibility or showcase projects.**



D/B - Making the Grade

- **Phase II Proposal Rating =**
50% Technical + 50% Price
- **Technical Rating**
 - **Technical Qualifications**
 - (key or specialty personnel/subcontractors - depth of experience)
 - **Technical Solution**
 - Design Solution (Graphic w/ Systems narrative)
 - Suretrak Schedule
 - Special Issues/Concerns (~)
 - **Sustainable Design**
 - **Past Performance (~)**



- | LEED™ Checklist | | | | | | | | | | Project Name | | |
|---|---|----|--------------------------|--|--|--|--|--|--|------------------|----------|--|
| | | | | | | | | | | LEED Project # | | |
| Yes | ? | No | | | | | | | | | | |
| 0 | 0 | 0 | Sustainable Sites | | | | | | | 14 Points | | |
| | | | Prereq 1 | Erosion & Sedimentation Control | | | | | | | LEED req | |
| | | | Prereq 2 | Environmental Protection , (AF Amendment) | | | | | | | Required | |
| | | | Prereq 3 | Cultural Resources Protection , (AF Amendment) | | | | | | | Required | |
| | | | Prereq 4 | Clean Water Protection , (AF Amendment) | | | | | | | Required | |
| | | | Credit 1 | Site Selection | | | | | | | 1 | |
| | | | Credit 2 | Urban Redevelopment | | | | | | | 1 | |
| | | | Credit 3 | Brownfield Redevelopment | | | | | | | 1 | |
| | | | Credit 4.1 | Alternative Transportation , Public Transportation Access | | | | | | | 1 | |
| | | | Credit 4.2 | Alternative Transportation , Bicycle Storage & Changing Rooms | | | | | | | 1 | |
| | | | Credit 4.3 | Alternative Transportation , Alternative Fuel Refueling Stations | | | | | | | 1 | |
| | | | Credit 4.4 | Alternative Transportation , Parking Capacity | | | | | | | 1 | |
| | | | Credit 5.1 | Reduced Site Disturbance , Protect or Restore Open Space | | | | | | | 1 | |
| | | | Credit 5.2 | Reduced Site Disturbance , Development Footprint | | | | | | | 1 | |
| | | | Credit 6.1 | Stormwater Management , Rate or Quantity | | | | | | | 1 | |
| | | | Credit 6.2 | Stormwater Management , Treatment | | | | | | | 1 | |
| | | | Credit 7.1 | Landscape & Exterior Design to Reduce Heat Islands , Non-Roof | | | | | | | 1 | |
| | | | Credit 7.2 | Landscape & Exterior Design to Reduce Heat Islands , Roof | | | | | | | 1 | |
| | | | Credit 8 | Light Pollution Reduction | | | | | | | 1 | |
| Yes | ? | No | | | | | | | | | | |
| 0 | 0 | 0 | Water Efficiency | | | | | | | 5 Points | | |
| | | | Credit 1.1 | Water Efficient Landscaping , Reduce by 50% | | | | | | | 1 | |
| | | | Credit 1.2 | Water Efficient Landscaping , No Potable Use or No Irrigation | | | | | | | 1 | |
| | | | Credit 2 | Innovative Wastewater Technologies | | | | | | | 1 | |
| | | | Credit 3.1 | Water Use Reduction , 20% Reduction | | | | | | | 1 | |
| | | | Credit 3.2 | Water Use Reduction , 30% Reduction | | | | | | | 1 | |
| Certified 26-32 points Silver 33-38 points Gold 39-51 points Platinum 52-69 points | | | | | | | | | | | | |

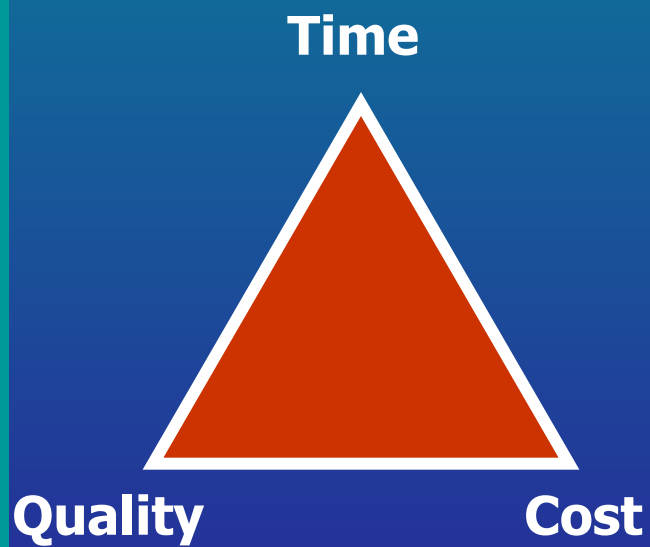


Questions

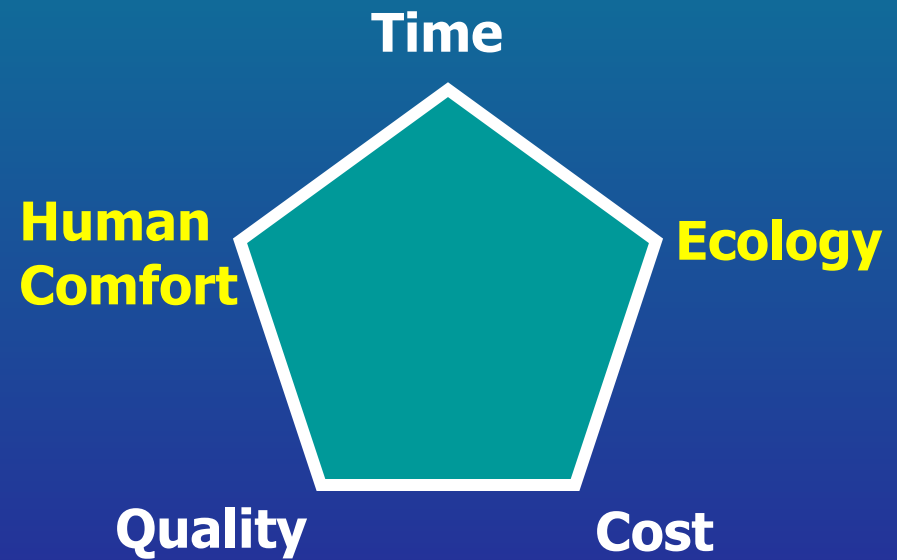
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Decision Model



Conventional



Sustainable

-HOK